



COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX



JANUARY 3, 1987

STAFF REPORT

APPLICATION NUMBER SEA 80-L-019-1

MOUNT VERNON DISTRICT

Applicant: Pan American World Airways, Inc.

Subject Parcel: 99-3 ((1)) 25

Present Zoning: I-6 Acreage: 3.6501

Proposed Use: Petroleum Products Storage

Applicable Zoning Ordinance Provision: 5-604

Application Filed: September 24, 1986

Planning Commission Hearing Date: January 8, 1987

Board of Supervisors Hearing Date: January 26, 1987

Staff Recommendation: The staff recommends that SEA 80-L-019-1 be approved subject to the Proposed Development Conditions contained in Appendix 1 of this report.

It should be noted that the content of this report reflects the analysis and recommendations of staff; it does not reflect the position of the Board of Supervisors.

PB

SPECIAL EXCEPTION APPLICATION

EA 80-L-019
FILED 09/24/86

PAN AMERICAN WORLD AIRWAYS, INC.
AMEND SE 80-L-019 FOR STORAGE FACILITIES FOR
PETROLEUM PRODUCTS TO PERMIT TWO FUEL STORAGE
TANKS OF GREATER HEIGHT AND CAPACITY THAN
THOSE PREVIOUSLY APPROVED

ZONING DIST SECTION: 05-0604

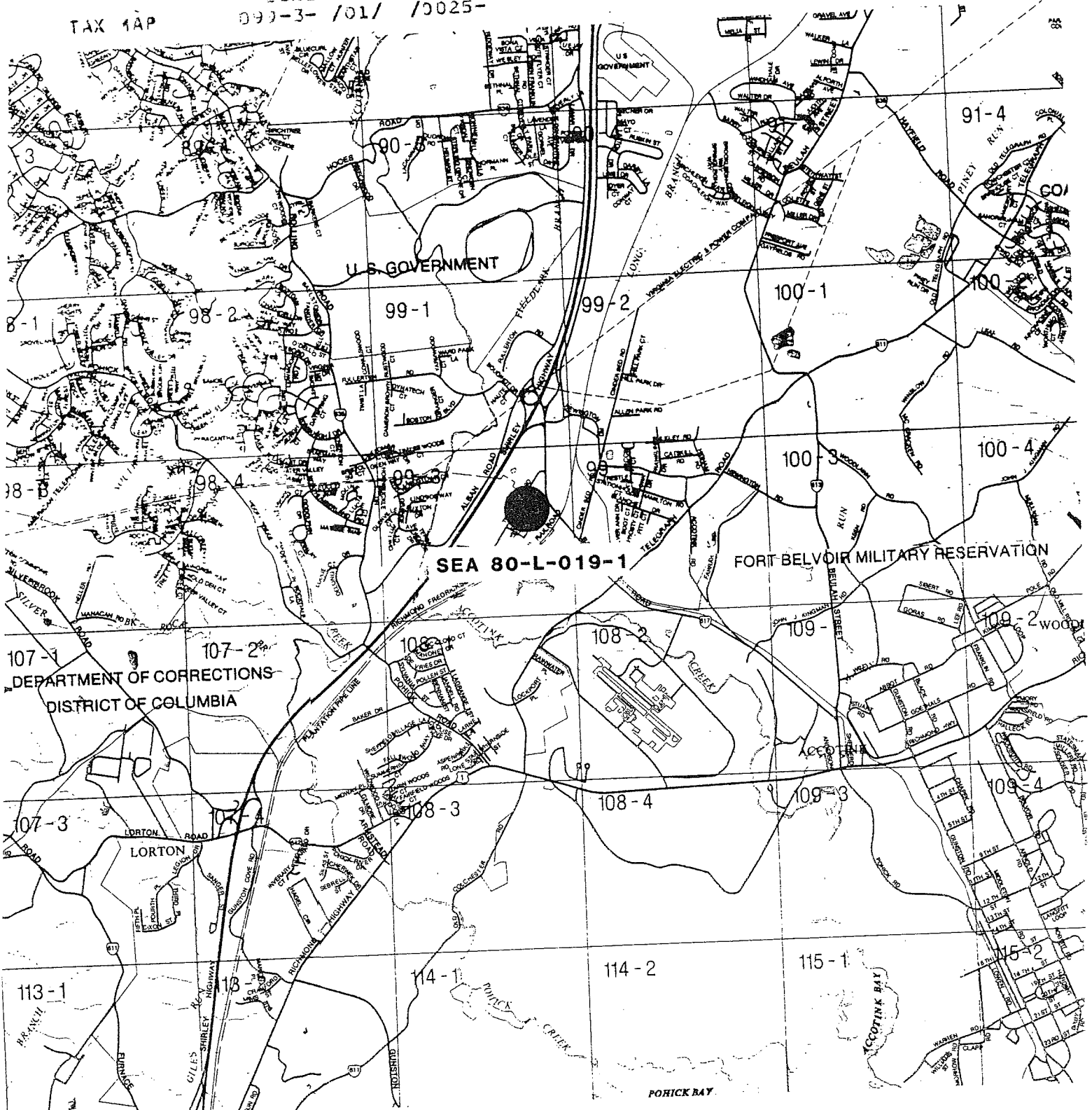
ART 9 CATEGORY/USE: 02-04

3.65 ACRES OF LAND; DISTRICT - MT VERNON
LOCATED: 8219 TERMINAL ROAD

PLAN AREA 4

TAX MAP

ZONED T-6
090-3- /01/ /0025-



EA 80-L-019

PAN AMERICAN WORLD AIRWAYS, INC.

ZONING DIST SECTION: 05-0604

ART 9 CATEGORY/USE: 02-04

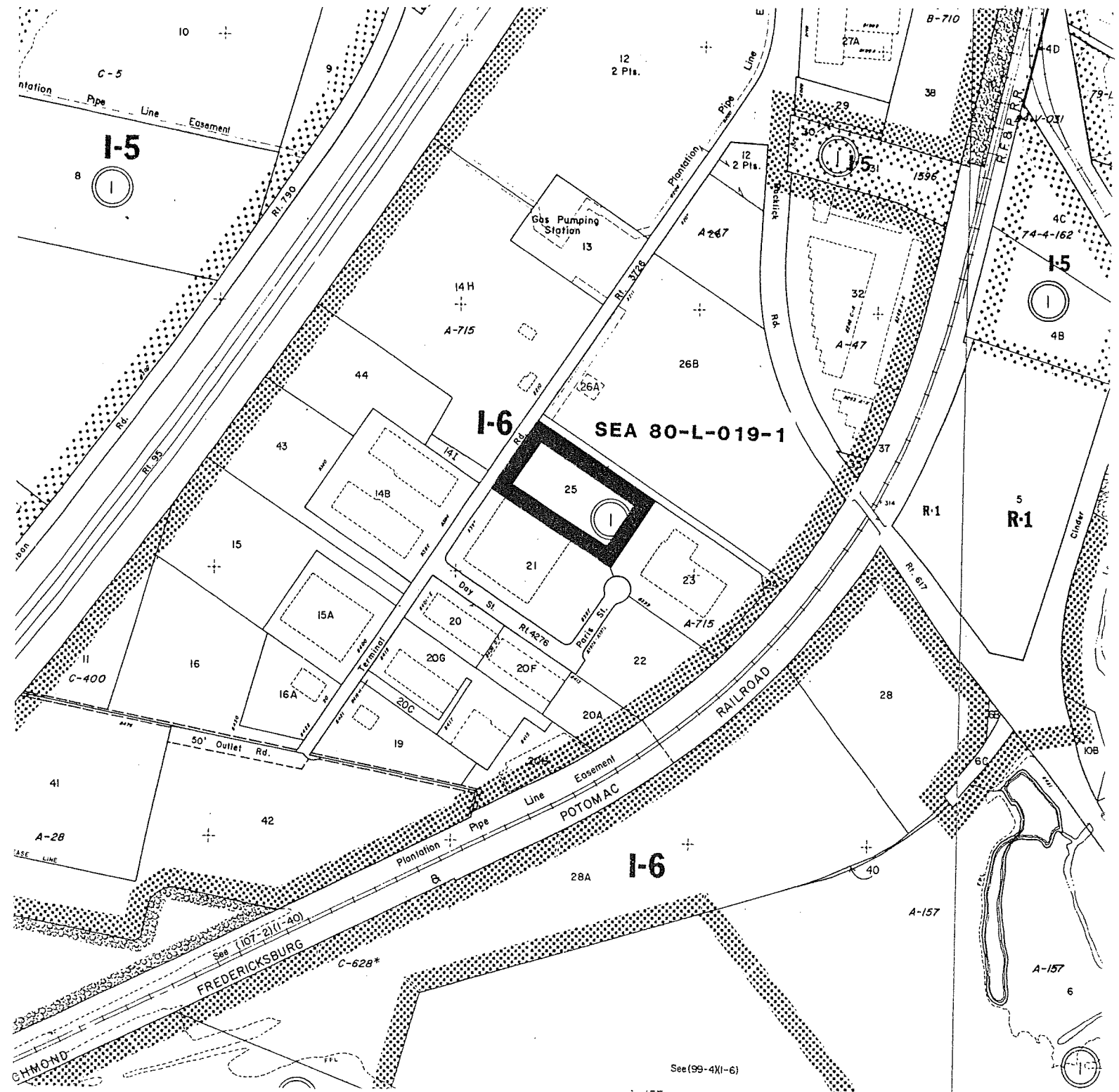
3.65 ACRES OF LAND; DISTRICT - MT VERNON

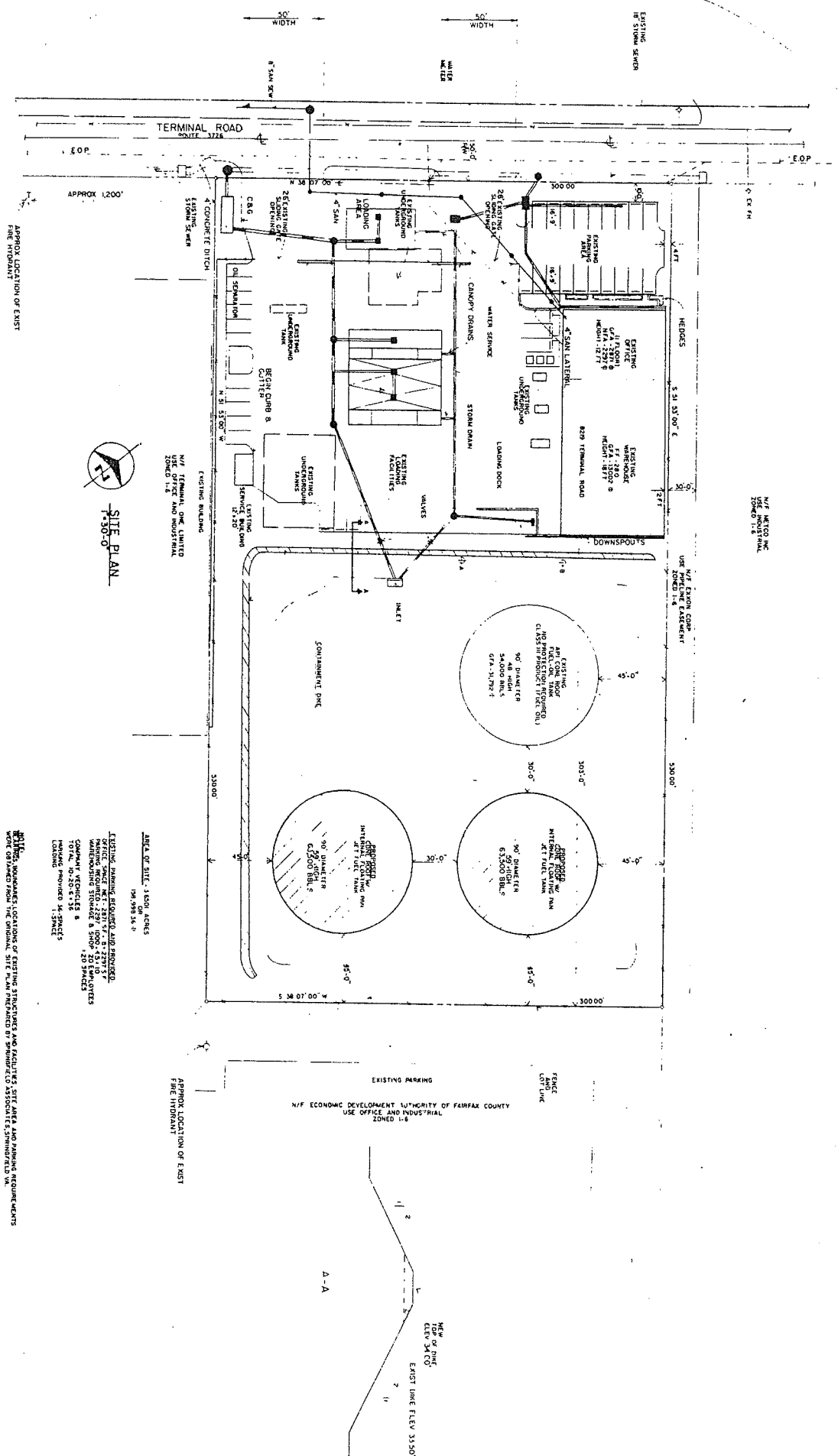
LOCATED: 8219 TERMINAL ROAD

ADDED 1-6

093-3- /01/ /0025-

PLAN AREA 4





A GLOSSARY OF TERMS FREQUENTLY
USED IN STAFF REPORTS WILL BE
FOUND AT THE BACK OF THIS REPORT.

DESCRIPTION OF THE APPLICATION

The applicant, Pan American World Airways, Inc., is seeking to amend SE 80-L-019 in order to construct two petroleum products storage tanks of a greater height and larger capacity than previously approved. Pan Am is seeking to construct two tanks 90 feet in diameter by 56 feet high with a capacity of 63,500 bbls for the storage of jet fuel. The tanks approved pursuant to SE 80-L-019 were 48 feet in height and 90 feet in diameter. The proposed tanks will be the vertical cone roof type and painted an off-white color. The facility will be manned by personnel from Quarles Robertson, the owner of the property and operator of the existing facilities. No truck transfers are planned from this site. The jet fuel will be transferred to Dulles and National Airports via existing Plantation Pipe Lines Company Washington Terminal pipe lines.

The applicant's statements are attached as Appendix 3 with the affidavit attached as Appendix 2.

Petroleum Storage tanks are a Heavy Industrial use which is a Category 5 Special Exception Use in the I-6 District and must conform with the applicable Zoning Ordinance Standards which are excerpted in Appendix 4 of this report.

LOCATION AND CHARACTER OF THE AREA

The application property is located on the eastern side of Terminal Road approximately 1500 feet south of its intersection with Backlick Road. The application property is in the I-6 District. The surrounding properties are also industrially zoned and developed. The property to the north of the application property is developed with petroleum products storage tank farms on either side of Terminal Road. The property to the south is developed with primarily warehouse uses. A pipeline easement runs along the northern property line. This area is located between Interstate 95 and the RF&P Railroad line.

Quarles Robertson, the applicant for the original Special Exception has constructed a portion of the development approved pursuant to SE 80-L-019. The office and storage building (60 feet by 150 feet), the petroleum loading racks and the remainder of the facilities located in the front portion of the property have been constructed along with one of the four tanks.

BACKGROUND

SE 80-L-019 was approved by the Board of Supervisors on June 23, 1980 subject to development conditions. The Development Conditions for SE 80-L-019 and a copy of the approved Special Exception Plat are attached as Appendices 5 and 6 respectively.

The applicant had requested administrative approval to construct the larger tanks by letter dated July 7, 1986. By a reply dated July 30, 1986 the Zoning Administrator noted that the approval had been for tanks 48 feet in height and 90 feet in height. To increase the capacity of the tanks constituted an enlargement or expansion of the use and, therefore, required an amendment of the approved Special Exception pursuant to paragraph 2 of Section 9-004 of the Zoning Ordinance. This correspondence is attached as Appendix 7.

COMPREHENSIVE PLAN RECOMMENDATION

The 3.65-acre property is located in Community Planning Sector S6 of the Springfield Planning District in Planning Area IV. Conformance with the Comprehensive Plan has been evaluated by reviewing the application in light of the following citations from page 426 of the Comprehensive Plan:

Newington/RF&P Corridor Area

General recommendations given below also apply to the other portion of this area which is located in Sector S7.

A. In brief, plan the southern and western portions of the area in medium-intensity industrial basic employment uses, taking account of environmental prohibitions and constraints which cannot be ameliorated by appropriate actions; plan the northeastern portion of the area for a planned residential community. Provide for extensive buffering between the industrial and residential areas as well as creative site reclamation. More detailed recommendations follow below."

Environment:

On page 471, Environment - Air Quality, the Comprehensive Plan recommends:

"9. Control any new sources of industrial pollutants, especially in the eastern portion of the County."

The Area IV Plan map shows this site and the vicinity as industrial use.

ANALYSISPreliminary Site Plan Description

The Preliminary Site Plan prepared by Burns & McDonnell and dated August 20, 1986 depicts the existing conditions on site with the proposed changes crosshatched. The two new storage tanks will be located in the rear of the property set back 45 feet from all property lines. A 30 foot distance will be maintained between all storage tanks. The setbacks and separation of tanks is consistent with that approved pursuant to SE 80-L-019. In addition to constructing the two new storage tanks the containment dike will be increased in height to accommodate the additional petroleum products storage capacity proposed by the applicant. The area where storage of fuel and the transfer of petroleum products occurs is surrounded by a chain link fence. No landscaping is shown on the Plat and none exists on site except for a grass strip approximately 10 feet wide along Terminal Road and some shrubbery located adjacent to the office/administration building. The Preliminary Site Plan for SEA 80-L-019 is attached to the front of this report.

Zoning Ordinance Requirements

As a Category 5 Special Exception use in the I-6 District the proposed petroleum products storage tanks are subject to not only the regulations which are applicable to the I-6 District, the proposal is also subject to the General Standards applicable to all Special Exception uses found in Section 9-006 of the Zoning Ordinance, the Standards for all Category 5 uses found in Section 9-503 and the Additional Standards for Heavy Industrial Uses found in Section 9-511. These standards are excerpted in Appendix 4 of this report.

Under Paragraph 1 of Section 9-511 the applicant is required to establish that the performance standards contained in Article 14 of the Zoning Ordinance are met. This information is included

in Appendix 3. The information supplied by the applicant indicates that they are met. Paragraph 2 permits the Board to impose additional yard or landscaping requirements to ensure that the proposed use is compatible with the surrounding community. No additional requirements are necessary in this instance as the surrounding property is industrially planned and zoned. The standards for all Category 5 Special Exceptions require that the proposed use meet the lot size and bulk regulations of the District, conform with the performance standards contained in Article 14 of the Zoning Ordinance and submission of a site plan, in accordance with the provisions of Article 17. The proposal conforms with the bulk and lot size requirements of the I-6 District and as noted above conforms with the provisions of Article 14.

This proposal conforms with the General Standards for all Special Exception uses found in Section 9-006 of the Zoning Ordinance except in two instances. Standard 5 requires that the proposed use shall meet the requirements of Article 13, Landscaping and Screening and Standard 6 requires that the open space requirements of the Zoning District be met. The Preliminary Plan prepared by Burns and McDonnell does not contain an open space tabulation. The I-6 District regulations require that ten percent of the property be landscaped open space (Section 5-608). The site plan submitted pursuant to this application should address this requirement. The landscaped areas located in the front of the application property which currently contain only lawn area should be landscaped with shade trees in accordance with the peripheral parking lot landscaping specified in Article 13. The provision of this additional landscaping will not only enhance the appearance of the application property and will also enhance the appearance of Terminal Road. It should be noted that there is no transitional screening required for this property as the surrounding property is planned and zoned for industrial uses.

Environmental Site Analysis

The two new petroleum storage tanks will have no impacts in relation to size or height. Both tanks are located within an industrial park and are surrounded with other buildings and similar tanks. Furthermore, there are no residential areas in close proximity upon which could be impacted visually by the bulk or appearance of the tanks. The tanks will be painted and unobtrusive off-white color.

The tanks will be a new source of volatile organic compound emissions and will need to be permitted and/or registered with the State Air Pollution Control Board, Northern Virginia Regional Office.

Transportation Analysis

The applicants indicate that the petroleum products will be transported to and from the two proposed tanks by pipeline only. There is no anticipated increase in employees on the site as existing Quarles Robertson personnel will operate and maintain the two proposed tanks.

Due the anticipated minimal increase in traffic generated by this proposal, adequate sight distance and adequate entrance widths along Terminal Road there is no significant impact on the surrounding road network. The comments of the Office of Transportation are attached as Appendix 8.

Land Use Analysis

As noted in the above analyses, this application will have no adverse impacts on the land use patterns of the vicinity. The proposed use is compatible with the land use recommendations of the Comprehensive Plan.

Trails/Nonmotorized Circulation:

There are no trail requirements for this site.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

With the provision of the additional landscaping described in the Zoning Ordinance Requirements section of this report above this proposal would be in conformance with the applicable Zoning Ordinance Standards. This issue is addressed by the Proposed Development Conditions contained in Appendix 1 of this report. It should be noted that the Proposed Development Conditions in Appendix also contains all of the conditions of approval for SE 80-L-019-1 contained in Appendix 5 of this report.

Recommendations

The staff recommends that SEA 80-L-019-1 be approved subject to the Proposed Development Conditions contained in Appendix 1 of this report.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions contained in Appendix 1, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards unless specifically waived by the Board.

It should be noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

APPENDICES

1. Proposed Development Conditions
2. Affidavit
3. Applicant's Statements
4. Applicable Zoning Ordinance Standards
5. Development Conditions for SE 80-L-019 contained in July 30, 1980 letter from the Clerk to the Board to Michael J. Giguere
6. Approved Special Exception Plat for SE 80-L-019
7. Correspondence relating to the conformance of the enlarged storage tanks with the approved Plat for SE 80-L-019
8. Comments of the Office of Transportation
9. Comments of the Site Review Branch, Division of Design Review, DEM
10. Glossary of Terms

PROPOSED DEVELOPMENT CONDITIONS

If it is the intent of the Board of Supervisors to approve SEA 80-L-019-1 located at Tax Map 99-3 ((1)) 25 for an increase in height and capacity of previously approved petroleum products storage tanks pursuant to Sect. 5-604 of the Fairfax County Zoning Ordinance, the staff recommends that the Board condition the approval by requiring conformance with the following development conditions:

1. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.
2. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the special exception plat approved with the application, as qualified by these development conditions.
3. This Special Exception is subject to the provisions of Article 17, Site Plans. Any plan submitted pursuant to this special exception shall be in substantial conformance with the approved Special Exception Plat and these conditions.
5. None of the proposed facilities shall be installed without the prior approval of the Fairfax county Fire Marshall.
6. All proposed facilities to be installed above ground shall be a dull non-reflective color to the satisfaction of the Director of the Department of Environmental Management.
7. Stormwater management measures and best management practice techniques required at the time of final site plan approval shall be implemented to the satisfaction of the Director of the Department of Environmental Management.
8. The petroleum products stored at this location shall be transported in vehicles which meet all applicable local, state and federal regulations if the product is not transported by pipeline.

9. Landscaping in accordance with the provisions of Article 13 in particular peripheral parking lot landscaping shall be provided along the Terminal Road frontage of the site. Such landscaping is subject to the review and approval of the County Arborist and shall not interfere with the required line-of-site for vehicles leaving the application property.

The above proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be himself responsible for obtaining the required Non-Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Under Section 9-015 of the Zoning Ordinance, this Special Exception shall automatically expire, without notice, eighteen (18) months after the approval date of the Special Exception unless the activity authorized has been established, or unless construction has commenced and is diligently pursued, or unless additional time is approved by the Board of Supervisors because of the occurrence of conditions unforeseen at the time of the approval of this Special Exception. A request for additional time shall be justified in writing, and must be filed with the Zoning Administrator prior to the expiration date.

AFFIDAVIT

APPENDIX 2

Pan American World Airways, Inc.
I, _____, do hereby make oath or affirmation that to the best of my knowledge and belief the foregoing information contained in this application is true; and:

1. (a) That the following constitutes a listing of names and last known addresses of all applicants, title owners, contract purchasers, and lessees of the land described in the application, and if any of the foregoing is a trustee, each beneficiary having an interest in such land, and all attorneys, real estate brokers, architects, engineers, planners, surveyors, and all agents who have acted on behalf of any of the foregoing with respect to the application:

Name	Address	Relationship
Quarles-Robertson Terminal Inc.	P.O. Box 5249, Fredericksburg, VA	22403
Pan American World Airways, Inc.	P.O. Box 592055AMF, Miami, FL	33159
Burns & McDonnell	2671 S.W. 27th Ave, Miami, FL	33133
		Owner
		Lessee
		Engineer

- (b) That the following constitutes a listing of the shareholders of all corporations of the foregoing who own ten (10) per cent or more of any class of stock issued by said corporation, and where such corporation has ten (10) or less shareholders, a listing of all the shareholders:

Name	Address	Relationship
Quarles-Robertson, Inc.	P.O. Box 5249, Fredericksburg, VA	22403
		Owner

- (c) That the following constitutes a listing of all partners, both general and limited, in any partnership of the foregoing:

Name	Address	Relationship
Not Applicable		

2. That no member of the Fairfax County Board of Supervisors, Planning Commission or Board of Zoning Appeals owns or has any interest in the subject land or has any interest in the outcome of the decision.

EXCEPT AS FOLLOWS: (If none, so state)

None

3. That within the five (5) years prior to the filing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or Board of Zoning Appeals or any member of his immediate household and family, either directly or by way of partnership in which any of them is a partner, employee, agent or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent or attorney or holds outstanding bonds or shares of stock with a value in excess of fifty dollars (\$50), has or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility or bank, including any gift or donation having a value of fifty dollars (\$50) or more with any of those listed in Par. 1 above.

EXCEPT AS FOLLOWS: (If none, so state)

None

WITNESS the following signature this 28 day of August, 19 86

Robert L. Burns
Applicant

The above affidavit was subscribed and confirmed by oath or affirmation before me this 28th day of August, 19 86, in the State of Florida.

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXPIRES OCT 4 1987

My commission expires: BONDED THRU GENRAL INSURANCE UND

Notary Public

STATEMENT OF USE

This amendment to SE 80-L-019 proposes the construction of two 63,500 bbl aviation fuel storage tanks, 90' diameter by 59' high in the existing Quarles-Robertson Terminal tank farm. The amendment proposes the construction of the 59' high tanks in place of the 48' high tanks approved under SE 80-L-019.

The proposed tanks would store commercial JET-A aviation kerosene for use at either Washington National or Dulles Airports. Fuel transfers would be accomplished through Plantation Pipe Lines Co's Washington Terminal pipe lines. No truck transfers are planned.

The tanks would be maintained and operated by existing Quarles-Robertson personnel under a lease agreement.

The tanks will be designed and constructed to American Petroleum Institute Standard No. 650, Welded Steel Tanks for Oil Storage and NFPA 30. The tanks proposed are the vertical cone roof type as are most of the existing tanks in the area. The exterior of the tank would be painted an off-white color.

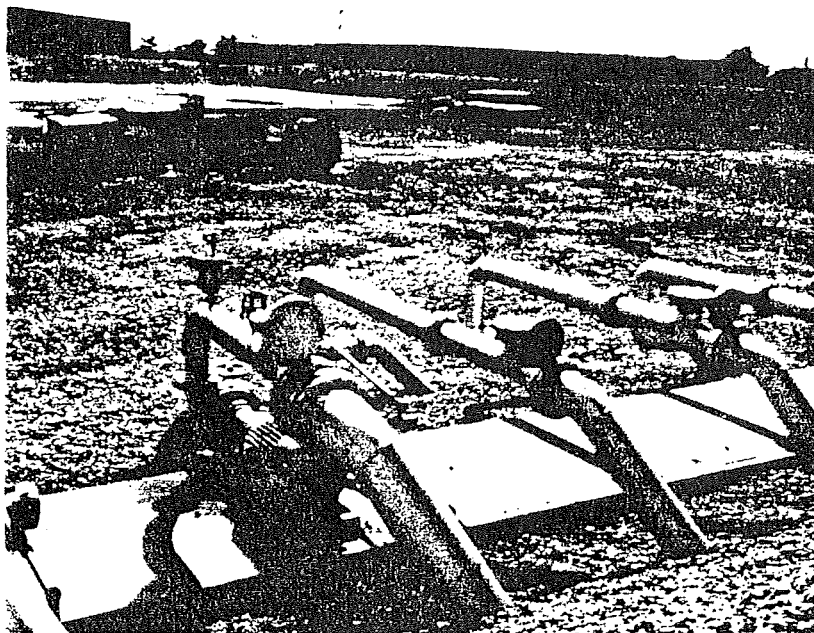


PHOTO A:
LOOKING SOUTH FROM POINT 'A' ON
PLAT TO NEW TANK SITE.

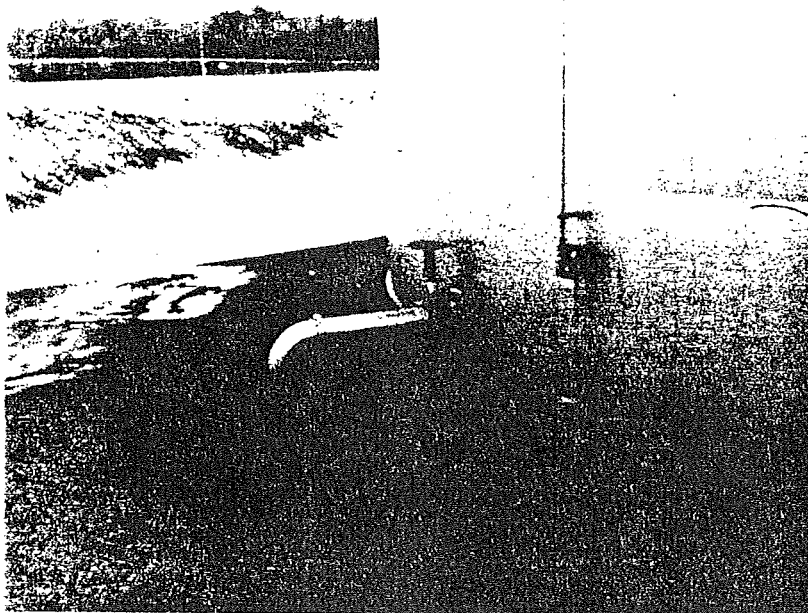


PHOTO B:
LOOKING N.E. FROM POINT 'B' ON
PLAT TO EXIST FUEL OIL TANK.

Form GCO-1-9-1 111679

date

designed

Burns & McDonnell
Engineers
Architects
Consultants
Miami, Florida

QUARLES - ROBERTSON
TERMINAL
SE 80-L-019

project

contract

dwg. no.

rev.

Burns & McDonnell
ENGINEERS - ARCHITECTS - CONSULTANTS

December 11, 1986

Mr. Peter Braham
Staff Coordinator
Zoning Evaluation Division
Office of Comprehensive Planning
10640 Page Avenue
Fairfax, Virginia 22030

RE: SE 80-L-019 Amendment to Increase Tank
Height to fifty-nine feet
Burns & McDonnell Engineers #86-302-1

Dear Mr. Braham:

This letter is in response to your November 21, 1986 letter outlining additional information required to process the amendment to SE 80-L-019.

Added to the plat are the requested items as follows:

1. Curbing and curb cuts along Terminal Road: See revised plat.
2. Landscaping along front of parking lot...., The property owner, Quarles-Robertson Terminal objects to this requirement for safety reasons. It is their belief that the landscaping will interfere with car and truck drivers' line of sight when accessing Terminal Road from the facility. Also adjacent to the building is a landscaped strip with a trimmed hedge, which presents a very pleasing and neat appearance from Terminal Road.

Given these circumstances we would like to request that the front of the parking area remain as it is.

3. A statement per sub-paragraph I of paragraph 6 of Section 9-011. See revised plat.
4. Description of change in diked capacity.

Per NFPA 30 the diked area must be of sufficient volume to contain the single largest tank volume above the plane of the top of the dike. A 90' diameter tank 59' high holds 327,629(1) cubic feet above the plane of the dike. The dike volume available to contain this volume equals the diked area times dike height, minus the remaining tank volumes below the plane of the dike. This is 348,949 cubic feet (2).

-continued-

Burns & McDonnell

December 11, 1986

To: Mr. Peter Braham

Page Two

There is a net surplus of 21,320 cubic feet (348,949 - 327,629) above the volume required to hold the largest tank volume above the dike wall. The 10 year return frequency and 2 hour duration storm water runoff is 10,916 cubic feet. Therefore, there is sufficient containment volume to hold the largest tank volume above the dike wall and the storm water runoff of a 10 year, 2 hour storm.

To accomplish the average dike height is increased to 7.5' (34-26.5), which requires increasing the existing dike elevation from 33.5' to 34.0'.

$$(1) \quad V = \frac{\text{Pie } d^2}{4} \times \text{height above dike} ; \quad \frac{(\text{Pie } (90)^2}{(4)} \times (59' - 7.5) = 327,629 \text{ cubic feet}$$

$$(2) \quad V = (250' \times 237' \times 7.5') - 2 \frac{(\text{Pie } (90)^2}{(4)} 7.5' = 348,949 \text{ cubic feet}$$

5. Revised Statement of Use per sub-paragraph I of paragraph 6, Section 9-011.

This amendment to SE 80-L-019 proposes the construction of two 59' high tanks in place of the 48' high tanks described as future in the original SE 80-L-019.

The proposed amendment would allow the construction of two 90' diameter by 59' high commercial JET-A Storage tanks, each with a nominal capacity of 63,500 bbls.

Fuel transfers would be accomplished through Plantation Pipe Lines Co's Washington Terminal pipe lines. No fuel will be on or off-loaded to truck vehicles. Fuel will be delivered from the Plantation Pipe Line Co's pipe line to the two storage tanks, and then pumped back to Plantation's outbound manifold into the pipe line to Washington National or Dulles International Airports.

Specifically per paragraph 6 are the following:

- A. Type of Operation(s): Bulk fuel Storage
- B. Hours of Operations: Fuel Transfer could occur at any time of day.
- C. Estimated number of patrons/clients/patients/etc.: None.
- D. Proposed number of employees: No additional employees.
- E. Qualifications of applicant and operators: The operators of the tanks will be the existing Quarles-Robertson Terminal employees, who are very experienced in bulk fuel storage procedures and operations.

-continued-

December 11, 1986

To: Mr. Peter Braham

Page Three

- F. Estimate of Traffic impact: None, no truck transfers.
 - G. Area to be served: Washington National and Dulles International Airports.
 - H. Building Facade and Architecture: The tanks will be designed and constructed to American Petroleum Institute Standard No. 650, Welded Steel Tanks for Oil Storage and NFPA 30. The tanks proposed are the vertical cone roof type as are most of the existing tanks in the area. The exterior of the tanks would be painted an off-white color.
 - I. Statement that the proposed use conforms: Included in the plat.
6. Adherence to ARTICLE 14, PERFORMANCE STANDARDS:

Listed is a response to each Part of Article 14.

Part 1: General Provision; Amendment conforms.

Part 2: Air Pollution Standard: We have contacted William N. Millward, Air Pollution Control Engineer with the State Air Pollution Control Board and are now in the process of registering our proposed tanks. The volatility of commercial DET-A is so low that it doesn't pose a great air pollution source. Also we are installing internal floating pans to meet NFPA. Enclosed is a copy of our correspondence with Mr. Millward.

Part 3: Fire and Explosion Hazard: We have had several talks with Mr. David L. Thomas, Engineer - Fire Protection Division on the appropriate method of fire protection for the proposed tanks. At this time we have agreed on installing internal floating pan roofs to remove the vapor space above the fuel (the vapor space is the weak-link in the chain, a fire or explosion would most likely occur or be promoted there) and providing fire access to the tanks.

Part 4: Radiation Standard: No sources are proposed.

Part 5: Electromagnetic Radiation: No sources are proposed.

Part 6: Liquid and Solid Waste: No sources are proposed.

Burns & McDonnell

December 11, 1986
To: Mr. Peter Braham
Page Four

Part 7: Noise Standards: No sources are proposed.

Part 8: Earthborn Vibration: No sources are proposed.

Part 9: Glare Standards: The proposed tanks will be painted a non-glare off-white color.

If you have any questions or require further information, please call.

Sincerely,
BURNS & McDONNELL

A handwritten signature in cursive script, appearing to read "Michael K. Miller".

Michael K. Miller, P.E.
Project Manager

MKM:ng
Encl.



COMMONWEALTH OF VIRGINIA
STATE AIR POLLUTION CONTROL BOARD
SPRINGFIELD TOWERS - SUITE 502
6320 AUGUSTA DRIVE
SPRINGFIELD, VIRGINIA 22150
(703) 644-0311

12/2/86

Mike Miller -

Attached are the forms
and the instructions you
will need for your storage
tanks project. Please
leave the "Reason for Registration"
blocks (Section E-1, page 1)
blank. I still believe this
will not be a permit but
a simple registration. Call
me if you have questions.

Bill Millward



(703) 644-0311

WILLIAM N. MILLWARD
AIR POLLUTION CONTROL ENGINEER

STATE AIR POLLUTION
CONTROL BOARD
COMMONWEALTH OF VIRGINIA

SPRINGFIELD TOWERS
SUITE 502
6320 AUGUSTA DRIVE
SPRINGFIELD, VA 22150

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EXECUTIVE DIRECTOR



COMMONWEALTH of VIRGINIA

*State Air Pollution Control Board
Northern Virginia Regional Office*

JOHN C. DOHERTY
REGIONAL DIRECTOR

SPRINGFIELD TOWERS - SUITE 502
6320 AUGUSTA DRIVE
SPRINGFIELD, VIRGINIA 22150
(703) 644-0311

January 18, 1985
(revised)

To All Permit Applicants:

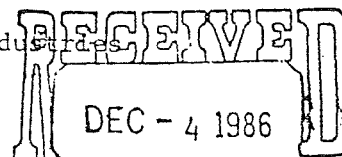
The Regulations for the Control and Abatement of Air Pollution of the State Air Pollution Control Board are established to implement the provisions of the Virginia Air Pollution Control Law and the Federal Clean Air Act. The provisions of the Regulations, unless specified otherwise, are applicable throughout the Commonwealth.

The Northern Virginia Regional Office of the State Air Pollution Control Board has geographic responsibility for the counties of Arlington, Fairfax, Loudoun and Prince William, and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. Additionally, there is a Regional Sub-office in Winchester responsible for the counties of Clarke, Frederick, Page, Shenandoah, and Warren, and the City of Winchester, and a Regional Sub-office in Fredericksburg responsible for the counties of Caroline, Culpeper, Fauquier, King George, Madison, Orange, Rappahannock, Spotsylvania, and Stafford, and the City of Fredericksburg. These regional offices have overall responsibility for air quality matters to include: permits for new and modified stationary sources and open burning, registration of qualifying new and existing stationary sources, enforcement of air quality standards and permit limitations, air quality monitoring, and control requirements during air pollution episodes. Telephone numbers are as follows: Regional Office (703) 644-0311; Fredericksburg Office (703) 898-5228; Winchester Office (703) 662-8071.

Fairfax County and the City of Alexandria have local air pollution control ordinances and have the responsibility for air pollution control matters within their jurisdictions. Telephone numbers are: Fairfax County (703) 691-2541; and the City of Alexandria (703) 838-4850.

Owners or developers are advised to contact the nearest air pollution control office for permit applications and assistance if you intend to install, construct, modify, or relocate and operate a facility that will have:

- a. Incinerators.
- b. Fuel burning equipment with heat input capacity of 350,000 BTU per hour or greater for solid fuel, one million BTU per hour or greater for liquid fuel, or ten million BTU per hour or greater for gaseous fuel.
- c. Manufacturing operations.
- d. Industrial plant operations.
- e. Petroleum, coating, printing, or miscellaneous industries which use or store volatile organic compounds.





ELIZABETH H. HASKELL, CHAIRMAN
MARTINSVILLE

CARL C. REDINGER, VICE CHAIRMAN
ALEXANDRIA

EDGAR B. BOYNTON
RICHMOND

TIMOTHY E. BARROW
VIRGINIA BEACH

WALLACE E. REED
CHARLOTTESVILLE

COMMONWEALTH of VIRGINIA

*State Air Pollution Control Board
Northern Virginia Regional Office*

SPRINGFIELD TOWERS-SUITE 502
6320 AUGUSTA DRIVE
SPRINGFIELD, VIRGINIA 22150
(703) 644-0311

JOHN C. DOHERTY
REGIONAL DIRECTOR

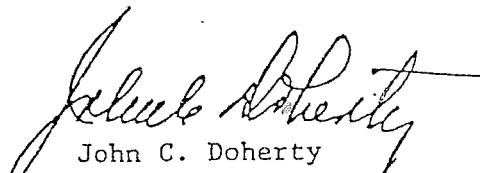
To Permit Applicants:

The Staff of the State Air Pollution Control Board analyzes all permit applications to determine whether a proposed installation will comply with the State Regulations and with National Ambient Air Quality Standards. In order to prepare this analysis properly, the information requested on the attached forms must be accurately provided. In addition, the following information should be furnished as appropriate.

1. Applications should include a description of any industrial process involved, and include a flow diagram on which all outside emission points are indicated.
2. Applications should include a statement of the amount and type of any hazardous pollutant emissions which may occur at the source.
3. For processes using coatings or inks which contain volatile organic compounds, please report the number of pounds of volatile organic compound per gallon of coating.

The engineering analysis of permit applications is a detailed process which is unnecessarily delayed whenever missing information must be sought from the applicant. In the interest of expediting this process, please provide the information requested in as much detail as possible.

Should you require any assistance in completing this application, please contact the Regional Office at the letterhead address.


John C. Doherty
Regional Director

WIGGS, McCLERKLIN & DAWKINS

ATTORNEYS AND COUNSELLORS AT LAW

SUITE 312

THE WYTHE BUILDING

515 WYTHE STREET

ALEXANDRIA, VIRGINIA 22314

(703) 683-6165

JOE O. WIGGS**†
HORACE McCLERKLIN**†
NOLAN B. DAWKINS**†

** VIRGINIA
† DISTRICT OF COLUMBIA

October 2, 1986

Honorable T. Farrell Egge
Supervisor, Mount Vernon District
2511 Parkers Lane
Alexandria, Virginia 22306

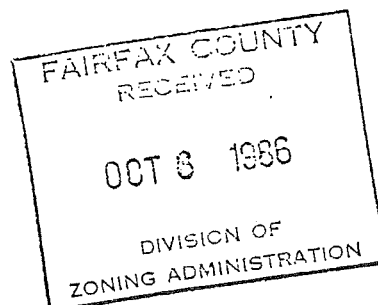
Re: Out-of-Turn Hearing
SEA-80-L-019-1

Dear Mr. Egge:

Our client, Pan American World Airways recently applied for an amendment to Special Exception SE 80-L-019 to allow the construction of two 90' diameter by 59' high aviation fuel storage tanks in the existing Quarles-Robertson Terminal tank farm, at Newington, Virginia.

The Zoning Administrator and her staff have been most responsive and helpful both to our client and to our inquiries on our client's behalf. However, we have been advised that in the normal course, approval of the Amendment (SEA-80-L-019-1) might take as long as 4-5 months. That, creates a severe problem for our client, which compels us to solicit your assistance, as our Supervisor, in being granted an out-of-turn hearing.

The fuel storage capacity that the two proposed tanks will provide is required to adequately meet the demand for aviation fuel at both Washington National and Dulles Airports. This extra capacity will help avoid fuel shortages during the very active spring travel season for international and domestic flights.



Honorable T. Farrell Egge
Page Two
October 2, 1986

Moreover, the storage volume required is adequately met with the two proposed 90' diameter by 59' high tanks in lieu of three 90' diameter by 48' high tanks specified in the original special exemption. This allows the capacity requirements to be fulfilled without the need to construct a third tank.

In order to meet the severe demands on our fuel supply in the spring, it is of critical importance that construction of the tank foundations and site work commence as soon as possible, particularly in view of the inevitable and predictable adverse weather conditions which are imminent.

On behalf of our client, we are requesting your personal intervention in having this matter heard on an emergency basis. We appreciate your consideration, and will be happy to provide any additional information that you might require.

Respectfully,

WIGGS, MCCLERKLIN & DAWKINS


Horace McClerklin

HMc/pal

cc: Zoning Administrator
Michael K. Miller, P.E.
Attorney Nancy Cohen



QUARLES PETROLEUM, Inc

P. O. BOX 5249
FREDERICKSBURG, VIRGINIA 22403
703-371-2400

August 26, 1986

Mr. Robert L. Butts
Manager Fuel Facilities
Pan American World Airways
P. O. Box 592055 AMF
Miami, Florida 33159

Dear Bob:

As per our phone conversation, I am writing to confirm that Quarles Petroleum, Inc. and Pan Am have agreed in principle that Pan Am will lease part of the terminal facility located in Newington, Virginia. It has further been agreed that Pan Am will erect two tanks for the storage of jet fuel.

I hope this letter will clear up any questions at Fairfax County.

Yours truly,

Ben Wafle
Treasurer

BW:caj

APPLICABLE ZONING ORDINANCE STANDARDS

9-006

General Standards

In addition to the specific standards set forth hereinafter with regard to particular special exception uses, all such uses shall satisfy the following general standards:

1. The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.
2. The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.
3. The proposed use shall be such that it will be harmonious with and will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.
4. The proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.
5. In addition to the standards which may be set forth in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.
6. Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.
7. Adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. Parking and loading requirements shall be in accordance with the provisions of Article 11.
8. Signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance.

9-503

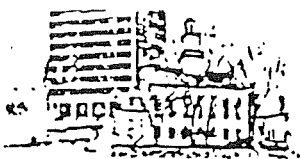
Standards For All Category 5 Uses

In addition to the general standards set forth in Sect. 006 above, all Category 5 special exception uses shall satisfy the following standards:

1. Except as qualified in the following Sections, all uses shall comply with the lot size and bulk regulations of the zoning district in which located.
2. All uses shall comply with the performance standards specified for the zoning district in which located.
3. Before establishment, all uses shall be subject to the approval of a site plan prepared in accordance with the provisions of Article 17.

Additional Standards for Heavy Industrial Uses

1. Each applicant for a heavy industrial use shall provide with his application an evaluation of his proposed use, by a person or firm qualified to make such evaluations, indicating how the use can be made to comply with the applicable performance standards in Article 14.
2. The Board may, in approving a special exception for a heavy industrial use, establish additional yard requirements, landscaping and screening and other standards that, in the opinion of the Board, will effect compatibility with the surrounding community.



COUNTY OF FAIRFAX

4100 CHAIN BRIDGE ROAD
FAIRFAX, VIRGINIA 22030



June 30, 1980

APPENDIX 5

Mr. Michael J. Giguere
Boothe, Prichard & Dudley
Post Office Box 338
Fairfax, Virginia 22030

Re: Special Exception #80-L-019

Dear Mr. Giguere:

At a regular meeting of the Board of Supervisors held on June 23, 1980, the Board approved Special Exception #80-L-019 in the name of Quarles-Robertson, Inc., a Virginia Corporation, located as Tax Map 99-3 ((1)) 25 for use as a petroleum storage facility pursuant to Section 5-604 of the Fairfax County Zoning Ordinance, by requiring conformance with the following development conditions:

1. This Special Exception is granted for the location indicated in the application and is not transferable to other land.
2. This Special Exception is granted for the building and uses indicated on the plats submitted with the application only.
3. A copy of this Special Exception SHALL BE POSTED in a conspicuous place along with the Non-Residential Use Permit on the property of the use and be made available to all Departments of the County of Fairfax during hours of operation of the permitted use.
4. A revised site plan, submitted in accordance with the provisions of Article 17, will satisfy ordinance requirements for parking, landscaping and screening.
5. None of the proposed facilities shall be installed without the prior approval of the Fairfax County Fire Marshall.
6. All proposed facilities to be installed above ground shall be a dull non-reflective color to the satisfaction of the Director of the Department of Environmental Management.

June 30, 1980

7. Stormwater management measures and best management practice techniques required at the time of final site plan approval shall be implemented.
8. The product shall be transported only in vehicles which meet all local, state and federal regulations including NFPA #30, Sections 2-2, 2-2.1, 2-2.3, 2-8, 2-8.2, 5-4, 5-4.1, 5-5.4, NFPA #385, BOCA F-2907, NFPA #704 and NFPA #325M.
9. This approval, contingent on the above noted conditions, shall not affect required compliance with the provisions of any applicable ordinances, regulations or adopted standards. This Special Exception shall not be valid until the required Non-Residential Use Permit is obtained through established procedures.

If you have any questions concerning this Special Exception, please call me.

Very truly yours,

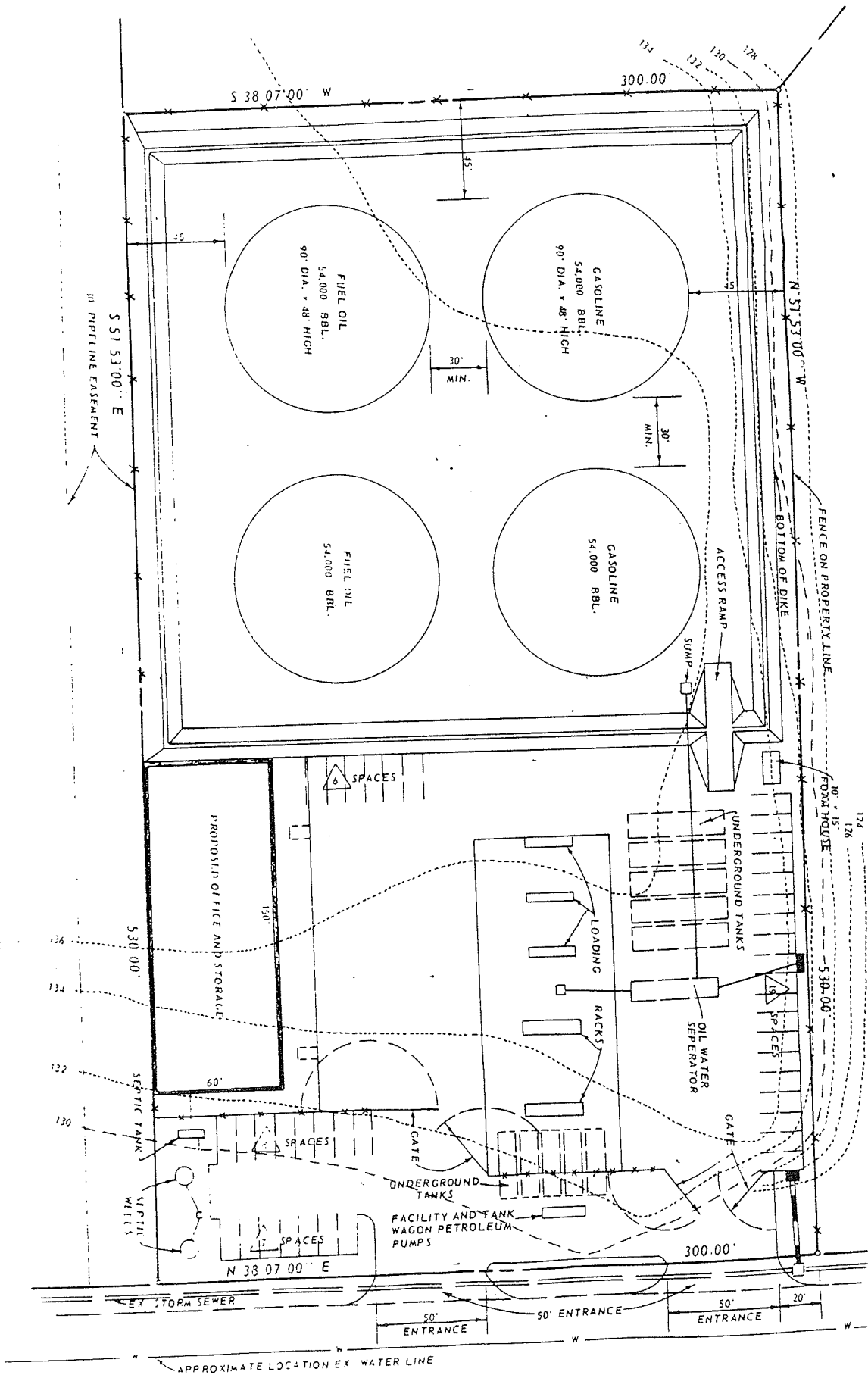


Ethel Wilcox Register
Clerk to the Board

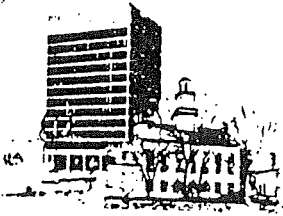
EWR/mg

cc: Mr. Patteson
Mr. Knowlton
Mr. Covington
✓ Mr. Davis

RELAYVILLE TERMINAL CORPORATION



TERMINAL ROAD
ROUTE 3726



691-4274

COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX

Office of Comprehensive Planning
 Zoning Administration Division
 10555 Main Street
 Fairfax, Virginia 22030



July 30, 1986

Michael K. Miller, P.E.
 BURNS & McDONNELL
 2671 S.W. 27th Avenue
 Miami, Florida 33133

RE: Proposed Addition of Fuel Storage Tanks
 Robertson Terminal, Inc., Newington
 Tax Map Reference: 99-3 ((1)) 25
 Special Exception SE 80-L-019
 Zoning District: I-6

Dear Mr. Miller:

This is in response to your letter of July 7, 1986 regarding two new fuel storage tanks for the above-referenced property.

As stated in your letter your request is to allow the construction of two storage tanks, 90 feet in diameter by 56 feet high (63,500 bbls), to store commercial JET-A (aviation kerosene). A review of the above-referenced special exception for this lot reveals that the Board of Supervisors approved a total of four above-ground fuel tanks. A copy of the approved resolution and plat is enclosed for your reference. You will note that each approved tank was for a maximum of 54,000 bbls. Two of the tanks, one of which has been constructed, were further limited to a diameter of 90 feet and a height of 48 feet. It is also noted that a Building Permit was approved in 1984 for a 30,000 gallon tank for storage of liquified propane gas (LPG).

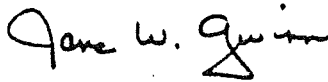
It is my determination that the two proposed tanks can not be allowed absent approval of an amendment to the special exception as the proposed capacity for the tanks exceeds the maximum size approved for each tank. This position is based on the provisions of Par. 2 of Sect. 9-004 which reads as follows:

2. Once established, the use shall be conducted in strict accordance with any conditions or restrictions imposed by the Board and all other requirements of this Ordinance. No use shall be enlarged, expanded, increased in intensity or relocated and no condition of the special exception shall be modified unless an application is made and approved for an amendment to the special exception in accordance with Sect. 014 below or a new special exception is approved.

Michael K. Miller, P.E.
BURNS & McDONNELL
July 30, 1986
Page 2

Enclosed for your convenience is the application form to be used for a special exception amendment. Should you have any questions or need further elaboration, please do not hesitate to contact me or Gilbert Knowlton on (703) 691-2385.

Sincerely,

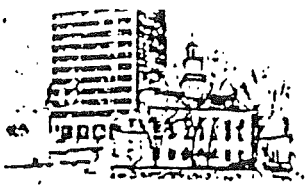


Jane W. Gwinn
Zoning Administrator

JWG/ctw

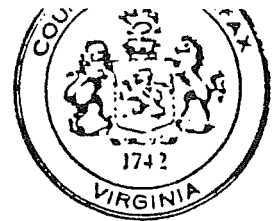
Attachments: A/S

cc: Gilbert R. Knowlton
Deputy Zoning Administrator
✓ Donald D. Smith, Chief
Permit, Plan Review Branch
SE 80-L-019 File



COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX

4100 CHAIN BRIDGE ROAD
FAIRFAX, VIRGINIA 22030



June 30, 1980

Mr. Michael J. Giguere
Boothe, Prichard & Dudley
Post Office Box 338
Fairfax, Virginia 22030

Re: Special Exception #80-L-019

Dear Mr. Giguere:

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3. A copy of this Special Exception SHALL BE POSTED in a conspicuous place along with the Non-Residential Use Permit on the property of the use and be made available to all Departments of the County of Fairfax during hours of operation of the permitted use.
4. A revised site plan, submitted in accordance with the provisions of Article 17, will satisfy ordinance requirements for parking, landscaping and screening.
5. None of the proposed facilities shall be installed without the prior approval of the Fairfax County Fire Marshall.
6. All proposed facilities to be installed above ground shall be a dull non-reflective color to the satisfaction of the Director of the Department of Environmental Management.

June 30, 1980

7. Stormwater management measures and best management practice techniques required at the time of final site plan approval shall be implemented.
8. The product shall be transported only in vehicles which meet all local, state and federal regulations including NFPA #30, Sections 2-2, 2-2.1, 2-2.3, 2-8, 2-8.2, 5-4, 5-4.1, 5-5.4, NFPA #385, BOCA F-2907, NFPA #704 and NFPA #325M.
9. This approval, contingent on the above noted conditions, shall not affect required compliance with the provisions of any applicable ordinances, regulations or adopted standards. This Special Exception shall not be valid until the required Non-Residential Use Permit is obtained through established procedures.

If you have any questions concerning this Special Exception, please call me.

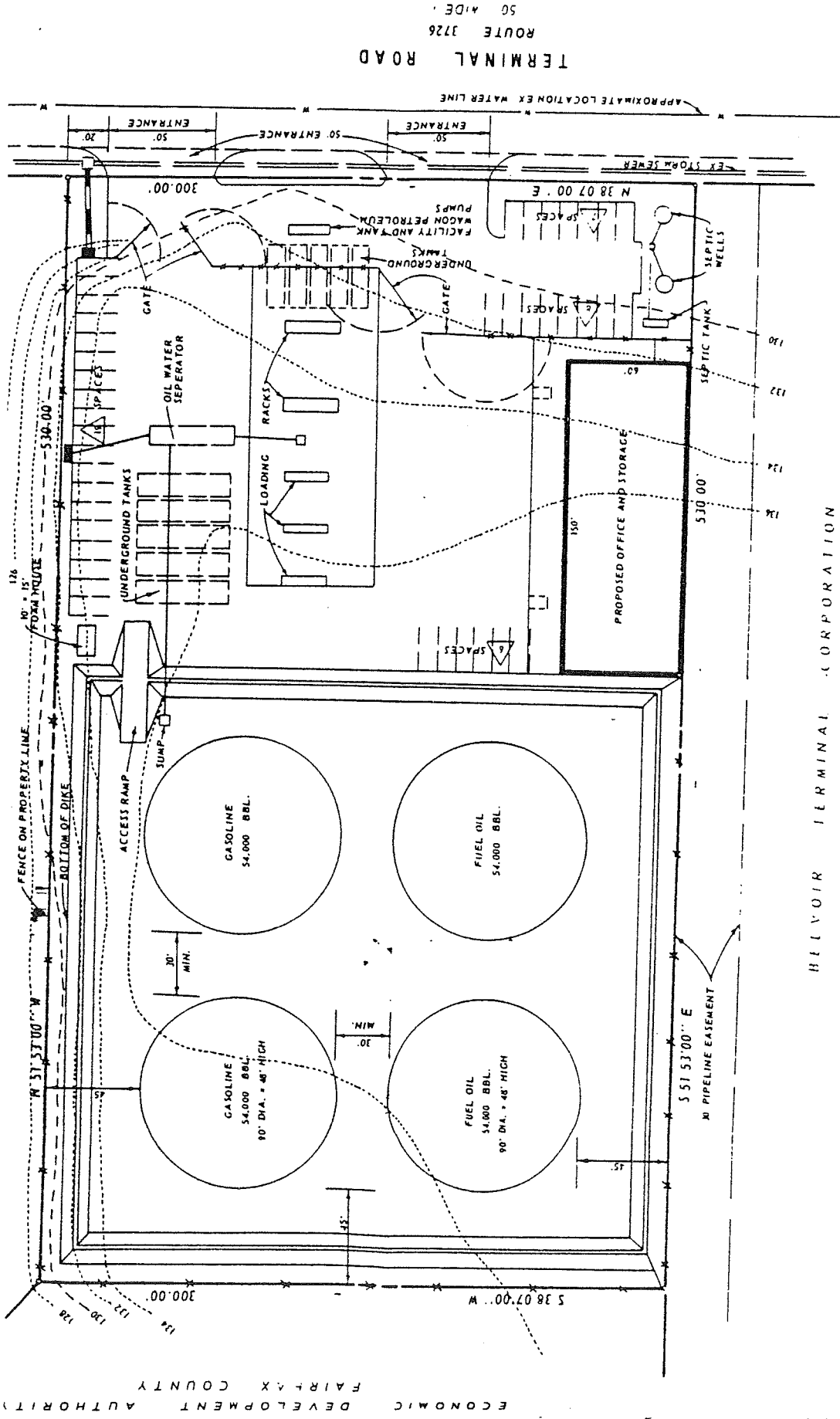
Very truly yours,



Ethel Wilcox Register
Clerk to the Board

EWR/mg

cc: Mr. Patteson
Mr. Knowlton
Mr. Covington
✓ Mr. Davis



HELVOR TERMINAL CORPORATION

OWNER: CROWN CENTRAL PETROLEUM CORPORATION
 7500 RITCHIE HIGHWAY
 GLEN BURNIE, MARYLAND 21061

Burns & McDonnell
ENGINEERS - ARCHITECTS - CONSULTANTS

July 7, 1986

Ms. Jane Gwinn
Zoning Administrator
3rd Floor Fairfax Building
10555 Main Street
Fairfax, VA 22030

Re: New Fuel Storage Tanks at Quarles-
Robertson Terminal, Inc. - Newington,
VA. Case No. SE-80-L-019
Burns & McDonnell No. 86-302-1

Dear Ms. Gwinn,

We are in the process of making construction drawings for two new fuel storage tanks to be located at the existing Quarles-Robertson terminal, 8219 Terminal Road, Newington, VA. The existing terminal was constructed with space for four above-ground storage tanks, however, only one tank was originally built.

At this time we would like to build two additional storage tanks, 90 foot diameter by 56 foot high (63,500 bbls) to store commercial JET-A (aviation kerosene).

It is our impression that this construction would fall under the existing Special Exemption and not require any special processing besides updating the original site plan.

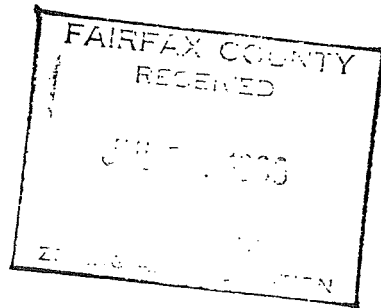
Ms. Gwinn, if you could review the above case and relay to us your views of the situation we would be very much in your debt.

We are available for questions at any time at the letterhead address and telephone. Thank you for your time.

Sincerely,
BURNS & McDONNELL

Michael K. Miller
Michael K. Miller, P.E.
Project Manager

MKM/ab



FAIRFAX COUNTY, VIRGINIA

MEMORANDUM

TO: Barbara A. Byron, Director DATE: November 17, 1986
Zoning Evaluation Division, OCP

FROM: John C. Herrington, Chief *JCH*
Site Analysis Branch, OT

FILE: 3-5

SUBJECT: Transportation Impace

REFERENCE: SEA 80-L-019-1; Pan American World Airways, Inc.
Traffic Zone 1102
Land Identification Map 99-3

Transmitted herewith are the comments of the Office of Transportation with respect to the subject application. These comments are based on plans/proffers made available to this Office date October 1, 1986.

The proposed addition of two fuel storage tanks would not appear to significantly impact the immediate road network due to the anticipated minimal increase in generated traffic, adequate site distance and adequate entrance widths along Terminal Road.

Therefore, this Office would not object to the approval of this application.

JCH/mlr

FAIRFAX COUNTY, VIRGINIA

MEMORANDUM

TO: Zoning Evaluation Division
Office of Comprehensive Planning

DATE: Oct. 16, 1986

FROM: John N. Winfield, Assistant Chief
Site Review Branch

SUBJECT: Special Exception; SEA 80-L-019; Pan American World Airways
Fuel Storage Tanks; Tax Map: 099-3-001-0025

We have reviewed the referenced application and submit the following comments:

1. Insufficient information has been provided to ascertain if this development conforms with all applicable regulations. Strict compliance will be required unless specifically waived or modified by the Board.

JNW/GMR/lmj

cc: Office of Transportation
Plan Control
George Rowzee

GLOSSARY

This Glossary is presented to assist citizens in a better understanding of Staff Reports; it should not be construed as representing legal definitions.

BUFFER - A strip established as a transition between distinct land uses. May contain natural or planted shrubs, walls or fencing, singly or in combination.

CLUSTER - The "alternate density" provisions of the Zoning Ordinance, which permit small lots and pipestem lots, if specified open space is provided. Primary purpose is to preserve environmental features such as stream valleys, steep slopes, prime woodlands, etc.

CONVENANT - A private legal restriction on the use of land, recorded in the land records of the County.

DEVELOPMENT PLAN - Conceptual, Final, Generalized. A Development Plan consists of graphic, textual or pictorial information, usually in combination, which shows the nature of development proposed for a parcel of land. The Zoning Ordinance contains specific instructions on the content of development plans, based upon the purpose which they are to serve. In general, development plans contain such information as: topography, location of streets and trails, means by which utilities and storm drainage are to be provided, general location and types of structures, open space, recreation facilities, etc. A Conceptual Development Plan is required to be submitted with an application for the PDH or PDC District; a Final Development Plan is a more detailed plan which is required to be submitted to the Planning Commission after approval of a PDH or PDC District and the related Conceptual Development Plan; a Generalized Development Plan is required to be submitted with all residential, commercial and industrial applications other than PDH or PDC.

DEDICATE - Transfer of property from private to public ownership.

DENSITY - Number of dwelling units divided by the gross acreage being developed (DU/AC). Density Bonus is an increase in the density otherwise allowed, and granted under specific provisions of the Zoning Ordinance when developer provides excess open space, recreation facilities, moderately priced housing, etc.

DESIGN REVIEW - The Division of the Department of Environmental Management which reviews all subdivision plats and site plans for conformance with County policies and requirements contained in the Subdivision Control Ordinance, the Public Facilities Manual, the Building Code, etc, and for conformance with any proffered plans and/or conditions.

EASEMENT - A right given by the owner of land to another party for specific limited use of that land. For example, an owner may give or sell easements to allow passage of public utilities, access to another property etc.

OPEN SPACE - The total area of land and/or water not improved with a building, structure, street, road or parking area, or containing only such improvements as are complementary, necessary or appropriate to use and enjoyment of the open area.

COMMON - All open space designed and set aside for use by all or designated portions of residents of a development, and not dedicated as public lands (dedicated to a homeowners association which then owns and maintains the property).

DEDICATED - Open space which is conveyed to a public body for public use.

DEVELOPED RECREATION - That portion of open space, whether common or dedicated, which is improved for recreation purposes.

PROFFER - A Development plan and/or written condition, which, when offered by an owner and accepted by the Board of Supervisors, becomes a legally binding part of the regulations of the zoning district pertaining to the property in question. Proffers, or proffered conditions, must be considered by the Planning Commission and submitted by an owner in writing prior to the Board of Supervisors public hearing on a rezoning application, and thereafter may be modified only by an application and hearing process similar to that required of a rezoning application.

PUBLIC FACILITIES MANUAL - The manual, adopted by the Board of Supervisors, which defines guidelines which govern the design of those facilities which must be constructed to serve new development. The guidelines include streets, drainage, sanitary sewers, erosion and sediment control and tree preservation and planting.

SERVICE LEVEL - An estimate of the effectiveness with which a roadway carries traffic, usually determined under peak anticipated load conditions.

SETBACK, REQUIRED - The distance from a lot line or other reference point, within which no structure may be located.

SITE PLAN - A detailed plan, to scale, depicting development of a parcel of land and containing all information required by the Zoning Ordinance. Site plans are required, in general, for all townhouse and multi-family residential development and for all commercial and industrial development.

SUBDIVISION ORDINANCE - An ordinance regulating the division of land into smaller parcels and which, together with the Zoning Ordinance, defines required conditions laid down by the Board of Supervisors for the design, dedication and improvement of land.

SUBDIVISION PLAT - A detailed drawing, to scale, depicting division of a parcel of land into two or more lots and containing engineering considerations and other information required by the Subdivision Ordinance.

USE - The specific purpose for which a parcel of land or a building, is designed, arranged, intended, occupied or maintained.

Permitted - Uses specifically permitted by the Zoning Ordinance Regulations of the Zoning District within which the parcel is located. Also described as a Conforming Use.

Non-Conforming - A use which is not permitted in the Zoning District in which the use is located but is allowed to continue due to its existence prior to the effective date of the Zoning Regulations(s) now governing.

Special Permit - A use specified in the Zoning Ordinance which may be authorized by the Board of Zoning Appeals or the Board of Supervisors in specified zoning districts, upon a finding that the use will not be detrimental to the character and development of the adjacent land and will be in harmony with the policies contained in the latest comprehensive plan for the area in which the proposed use is to be located. A Special Permit is called a Special Exception when granted by the Board of Supervisors.

Transitional - A use which provides a moderation of intensity of use between uses of higher and lower intensity.

VARIANCE - A permit which grants a property owner relief from certain provisions of the Zoning Ordinance when, because of the particular physical surroundings, shape or topographical condition of the property, compliance would result in a particular hardship or practical difficulty which would deprive the owner of the reasonable use of the land or building involved. Variances may be granted by the Board of Zoning Appeals after notification, advertising, posting and conduct of a public hearing on the matter in question.

VPD - Vehicle trips per day (for example, the round trip to and from work equals two VPD). Also ADT - Average Daily Traffic.

ENVIRONMENTAL TERMS

ACOUSTICAL BERM - Usually a triangular-shaped earthen structure paralleling a highway noise source and extending up from the elevation of the roadway a distance sufficient to break the line of sight with vehicles on the roadway.

AQUIFER - A permeable underground geologic formation through which groundwater flows.

AQUIFER RECHARGE AREA - A place where surface runoff enters an aquifer.

CHANNEL ENLARGEMENT - A development-related phenomenon whereby the stream bank's full capacity is exceeded with a greater frequency than under natural undeveloped conditions, resulting in bank and stream bottom erosion. Hydrology literature suggests that flows produced by a storm event which occurs once in 1.5 years are the channel defining flows for that stream.

COASTAL PLAIN GEOLOGIC PROVINCE - In Fairfax County, it is the relatively flat southeastern 1/4 of the County, distinguished by low relief and a preponderance of sedimentary rocks and materials (sands, gravels, silts) and a tendency towards poorly drained soils.

dB(A) - Abbreviation for a decibel or measure of the noise level perceived by the ear in the A scale or range of best human response to a noise source.

DRAINAGE DIVIDE - The highest ground between two different watersheds or subheds.

ENVIRONMENTAL LAND SUITABILITY - A reference to a land use intensity or density which should occur on a site or area because of its environmental characteristics.

ERODIBLE SOILS - Soils susceptible to diminishing by exposure to elements such as wind or water.

FLOODPLAIN - Land area, adjacent to a stream or other surface waters, which may be submerged by flooding; usually the comparatively flat plain within which a stream or riverbed wanders.

IMPERVIOUS SURFACE - A natural or man-made surface (road, parking lot, roof top, patio) which forces rainfall to runoff rather than infiltrate.

MONTMORILLONITIC CLAY - A fine grained earth material whose properties cause the clay to swell when wet and shrink when dry. In addition, in Fairfax County these clays tend to slip or slump when they are excavated from slope situations.

NEF - Noise Exposure Forecast - A noise description for airport noise sources.

PERCENT SLOPE - The inclination of a landform surface from absolute horizontal; formula is vertical rise (feet) over horizontal distance (feet) or V/H.

PIEDMONT GEOGRAPHIC PROVINCE - The central portion of the County, characterized by gently rolling topography, substantial stream dissection, V-shaped stream valleys, an underlying metamorphic rock matrix (schist, gneiss, greenstone) and generally good bearing soils.

PIES/ENVIRONMENT - Project Impact Evaluation - A systematic comprehensive environmental review process used to identify and evaluate likely environmental impacts associated with individual projects or area plan proposals.

SHRINK-SWELL RATE - The susceptibility of a soil's volume to change due to loss or gain in moisture content. High shrink-swell soils can buckle roads and crack foundations.

SOIL BEARING CAPACITY - The ability of the soil to support a vertical load (mass) from foundations, roads, etc.

STREAM VALLEY - Any stream and the land extending from either side of it to a line established by the high point of the concave/convex topography, as delineated on a map adopted by the Stream Valley Board. For purposes of stream valley acquisition, the five-criteria definition of stream valleys contained in 'A Restudy of the Pohick Watershed' (1963) will apply. The two primary criteria include all the land within the 100-year floodplain and the area along the floodplain in slopes of 15 percent or more.

STORM WATER MANAGEMENT - An emerging art/science that attempts to treat storm water runoff at the source and as a resource. Storm water management programs seek to mitigate or abate quantity and quality impacts associated with development by the specific design of on-site systems such as Detention Devices which slow down runoff and in some cases improve quality, and Retention Systems, which hold back runoff.

TRIASSIC GEOGRAPHIC PROVINCE - The western 1/4 of Fairfax County, characterized by broad expanses of nearly level topography, subtle ridge lines, a shallow depth to sedimentary rocks which are locally intruded by igneous rocks and a tendency towards soils with high shrink-swell properties.

It should be noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

APPENDICES

1. Proposed Development Conditions
2. Affidavit
3. Applicant's Statements
4. Applicable Zoning Ordinance Standards
- ⑤. Development Conditions for SE 80-L-019 contained in July 30, 1980 letter from the Clerk to the Board to Michael J. Giguere
- ⑥. Approved Special Exception Plat for SE 80-L-019
- ⑦. Correspondence relating to the conformance of the enlarged storage tanks with the approved Plat for SE 80-L-019
8. Comments of the Office of Transportation
9. Comments of the Site Review Branch, Division of Design Review, DEM
10. Glossary of Terms